|  | Application No.  | Applicant(s)                                   |                           |
|--|--|--|---------------------------|
| Notice of Allowability   | 10/051,593   | CIOFFI ET AL.                                  |                           |
|  | Examiner   | Art Unit                                       |                           |
|  | Phuongchau Ba Nguyen   | 2665   |                           |
| The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Right of the Office or upon petition by the applicant. See 37 CFR 1.313  | (OR REMAINS) CLOSED in this app<br>or other appropriate communication<br>IGHTS. This application is subject to   | olication. If not includ will be mailed in due | ed<br>course. <b>THIS</b> |
| 1. X This communication is responsive to 11-15-4.  |  |  |                           |
| 2. X The allowed claim(s) is/are 45-49; Renumbered as 1-5.   |  |  |                           |
| 3. $igotimes$ The drawings filed on 29 April 2002 are accepted by the Ex   | xaminer.   |  |                           |
| 4. Acknowledgment is made of a claim for foreign priority unall All b) Some* c) None of the:  1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | be been received. be been received in Application No cuments have been received in this communication to file a reply received. | national stage applica                         |                           |
| <ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm<br/>INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>   |  |  | OTICE OF                  |
| $6.\ \square$ CORRECTED DRAWINGS ( as "replacement sheets") mus  | st be submitted.   |  |                           |
| <ul><li>(a) ☐ including changes required by the Notice of Draftspers</li></ul>   | son's Patent Drawing Review (PTO-9   | 948) attached                                  |                           |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date   |  |  |                           |
| (b) including changes required by the attached Examiner's<br>Paper No./Mail Date   | s Amendment / Comment or in the O  | ffice action of                                |                           |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the   | .84(c)) should be written on the drawin<br>he header according to 37 CFR 1.121(c   | igs in the front (not the                      | back) of                  |
| <ol> <li>DEPOSIT OF and/or INFORMATION about the depo-<br/>attached Examiner's comment regarding REQUIREMENT</li> </ol>  | sit of BIOLOGICAL MATERIAL m<br>FOR THE DEPOSIT OF BIOLOGICA   | nust be submitted. I<br>AL MATERIAL.           | Note the                  |
| Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date   | 5. ☐ Notice of Informal Pa<br>6. ☐ Interview Summary<br>Paper No./Mail Date<br>8), 7. ☐ Examiner's Amendm  | (PTO-413),<br>e                                | O-152)                    |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material  | 8. ⊠ Examiner's Stateme<br>9.  | nt of Reasons for Allo                         | wance                     |

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## Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Regarding claims 45-48, the prior art fails to teach or suggest in a bi-directional data transmission system that facilitates communications between a plurality of remote units and a central unit using a symbol-based discrete multi-carrier transmission scheme that has a multiplicity of discrete sub-channels provided for facilitating upstream communications between the plurality of remote units and the central unit, an apparatus for transmitting data from a selected remote unit to the central unit, comprising "an encoder coupled to said serial to parallel converter for encoding said parallel data according to one of a first and a second modulation schemes responsive to a control signal, said first modulation scheme being operative during a polled transmission mode and requires a receiver at said central unit to have prior knowledge of the identity of said selected remote unit for decoding, said second modulation scheme being operative during a fast access transmission mode and does not require the receiver at said central unit to have prior knowledge of the identity of said selected remote unit for decoding," in combination with other limitations, as specified in the independent claim 45.

Regarding claim 49, the prior art fails to teach or suggest In a bi-directional data transmission system that facilitates communications between a plurality of remote units and a central unit using a symbol-based discrete multi-carrier transmission scheme that has a multiplicity of discrete sub-channels provided for facilitating upstream communications between the plurality of remote units and the central unit, an apparatus

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for receiving data sent from a selected remote unit to the central unit, comprising "a decoder coupled to said FFT demodulator for decoding demodulated data from said FFT demodulator according to one of a first and a second demodulation schemes responsive to a control signal, said first demodulation scheme being operative during a polled transmission mode and requires prior knowledge of the identity of said selected remote unit for decoding, said second demodulation scheme being operative during a fast access transmission mode and does not require prior knowledge of the identity of said selected remote unit for decoding," in combination with other limitations, as specified in the independent claim 49.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuongchau Ba Nguyen

Examiner Art Unit 2665

DUCHO
PRIMARY EXAMINER

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